

ABSTRACT OF THE DISCLOSURE

A method is provided for producing lactose from whey or a permeate resulting from the ultrafiltration of whey. The method includes replacing at least part of the multivalent cations of the whey or permeate by monovalent metal cations to obtain a whey or permeate depleted of multivalent cations. The method then replaces at least part of the multivalent inorganic anions and organic acid anions of the whey or permeate, by monovalent anions non-able to form complexes with the multivalent cations, this latter replacement step is carried out before or simultaneously with the replacement of at least part of the multivalent cations of the whey or permeate. The method then crystallizes the whey or permeate resulting from the replacement steps to obtain crystallized lactose and a mother liquor enriched in monovalent metal cations.